RESEARCH ARTICLE

Taxonomic observation of *Cotugnia Indiana* sp. Nov. (Cestoda: Davaineidae, Fuhrmann 1907) from *Columba livia*

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ABSTRACT

The present investigation deals with a new species of the genus *Cotugnia* (Dimare, 1893) from the intestine of *Columba livia*, at Dharni Dist Amravati, M.S. India. The new species *Cotugnia indiana* comes closer to all the known species of the genus *Cotugnia* in general topography of organ but differs due to scolex square, which bears four suckers. Rastellum large, oval, placed anteriorly to scolex with 100-120 rostellar hooks. Neck medium, broader than long. Mature proglottids almost five times broader than long, with lateral margin slightly concave, each proglottid is having double set of reproductive organs. Testes oval to rounded in shape, 115-120 in numbers. Cirrus pouch small, oval, obliquely placed. Cirrus thin, coiled, within cirrus pouch. Vas deferens tubular, coiled, runs obliquely. Cirrus and vagina open from common genital pore which is small, oval to rounded, marginally placed. Vagina is thin tube, runs transversely, posterior to cirrus pouch. Receptaculum seminis thin, coiled tube, reaches to ootype. The ootype is medium; ovary bilobed, lobes are slightly unequal. Vitelline gland large, compact. Longitudinal excretory canals long, tubular.

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Genus *Cotugnia* was erected by Diamare, 1893 with type species *C.digonopora* (Pasqule, 1890) collected from the domestic fowl. So far following species of the avian cestode Genus *Cotugina* have been reported.

- C. digonopora (Pasquale, 1890), Diamare, 1893.
- C.polyacantha, Fuhrmann, 1909.
- C. cuneatea tenuis, Meggitt, 1924.
- C. joyeuxi Baer, 1925.
- *C. parva* Baer, 1925
- C. fleari Meggitt, 1927.
- *C. bahli* Johri, 1934.
- C. intermedia Johri, 1934.
- C. noctua Johri, 1934.
- C. taiwanensis Yamaguti, 1935.
- C. rimandoi Tubangui et Masilungan, 1937.
- C. magna Burt, 1940.
- C. aurangabadensis, Shinde, 1969.
- C. columbae, Shinde, 1969.

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- C. srivastavi, Malviya and Datta, 1970.
- C. magdoubii, Magzoubi and Kasim, 1980.
- C. satpulensis, Malhotra and Capoor, 1983.
- C. yamaguti, Shinde, 1985.
- C. vishakhapatnamensis Kolluri, 1988.
- C. rajivji Jadhav et al., 1994.
- C. kamatiensis, Kharade and Shinde, 1995.
- C. chengmaii C. Wongsawad and Jadhav 1998.
- C. manishae, Shinde, 1999.
- C. ganguae Shinde, 1999.
- C. mehdii Mahajan et al., 1999.
- C. alii, Shinde et al., 2002.
- C. sillodensis Jadhav et al., 2004.
- C. singhi Pawar et al., 2004.
- C. lohaensis Jadhav et al., 2004.
- C.shankari Tat and Jadhav 2005.
- *C. liviae* Patil *et al.*, 2005.
- C.streptopelii Jadhav et al., 2010.
- C. hafeezi Nanware et al., 2010

MATERIALS AND METHODS

During the course of investigation 09 cestode parasites were collected from the intestines of *Columba livia*. These cestodes were washed with water, fixed in 5% formalin for 24 hours. Subsequently, they were